

K-12 Regional Virtual Campus:

Project Planning

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This document is intended for use as a project planning tool for the Regional Virtual Campus special project team and other interested stakeholders. Stakeholders approved the Project Proposal (see Appendix) on October 11, 2012. The planning document is used as a guide to facilitate project presentation and implementation. The first section of this planning document explains the background scenario for the K-12 Regional Virtual Campus, or the RVC. The second section describes each of the required technology tools, collectively referred to as the RVC Technology Suite, including: special features, costs, hosting and maintenance requirements, training needs, benefits and risks, and legal concerns. The third section of the document discusses how the project team plans to present the Technology Suite to stakeholders.

Section I: Background

The RVC is a collaborative effort among three rural school districts to serve the needs of the districts' remote students and other students who choose to learn from home. The Regional Virtual Campus (RVC) is 100% full-time online-learning program designed to meet the needs of about 250 target students and promote learning without boundaries. Three distance education technologists, one from each district, have joined together to form a temporary special project team with the objective of making sound technology recommendations for the RVC based on the districts' established technology requirements. These requirements include technology tools to be used for the following purposes: asynchronous interaction, synchronous interaction, content development, media add-ons, and student assessment and feedback.

The RVC is funded by a federal Community Connect grant intended to use the Internet to improve educational access to remote communities. These grant monies have been allocated by the township to fund the RVC's initial startups costs, including necessary technology and equipment, labor, and training, as well as two years' operating expenses. The three districts plan to establish the RVC as invested members and later invite other school systems to join the Virtual Campus as paid affiliate members. The revenue from affiliate members will help fund the RVC. The grant funding for startup is limited and does not allow for the purchase or development of a learning management system; therefore, the project team plans to use a variety of technologies available at little to no cost to satisfy the districts' technology requirements.

Section II: Technology Requirements

To serve the needs of remote and home learners, the districts identified the following technology requirements for the Regional Virtual School: environment for asynchronous interaction, environment synchronous interaction, tool for content development, media add-on tool, and environment for student assessment and feedback. Table 1 on page five summarizes all of the technologies.

Environment for asynchronous interaction

The RVC project team recommends using the districts' existing email client, Microsoft Outlook. In conjunction with the email client, the project team recommends using Free Forums by ProBoards to facilitate discussion threads or conferencing and file sharing. Free Forums was selected due to its reliability, scalability, and versatility. According to ProBoards, Inc. (2012) and Forum Software Reviews (2012), the Free Forums service boasts an exhaustive list of features, including but not limited to:

- Security and spam protection
- Variety of different user profiles including admin, moderator, guests and other customizable roles
- Ability to limit forum registration and approve members for privacy purposes
- Assortment of user analytics
- Supports seven social-networking sites including Facebook and Twitter

- Easy-to-use text editor with many useful features including emoticons and spell check
- Ability to embed video, images, and other files into postings
- Ability to create and include customizable polls
- Private and instant messaging and calendar features
- Only free forum to offer mobile applications for Android and iPhone
- Offers customizable sub-domain names

Furthermore, Free Forums was selected due to its low price. The free version of Free Forums includes banner advertisements, while ad-free versions of the Free Forums service are available at a nominal monthly fee of \$7.00 for 50,000 views (ProBoards, Inc., 2012). There are other pricing plans for less or more views, as needed. Another positive feature of Free Forums is that all forum content is hosted remotely and will not require any hosting by the districts; however, it is recommended that discussions are exported and archived by the RVC for storage purposes. This is expected to require some storage space. Additionally, use of ProBoards will require an initial orientation and ongoing training and support to ensure most effective and efficient use by RVC students, faculty, administration, and parents. Finally, parents or instructors will have to complete the registration process for users under the age of 13.

Environment for synchronous interaction

The RVC project team recommends using Cisco WebEx as the synchronous communication tool to allow faculty, students, parents, administration, and other RVC users to communicate at the same time and even face-to-face when preferred. WebEx is recommended for its versatility, reliability, and proven use in e-learning. Components of WebEx (Cisco, 2012a) include on-demand audio and visual conferencing, file and application sharing, and instant messaging. WebEx also offers users an interactive whiteboard and allows meetings to be recorded and archived for future reference. WebEx users may attend meetings via VOIP using computer with Internet and headset or call in using a telephone when no Internet connection is available. In addition, WebEx meetings may be password-protected to ensure privacy. WebEx is also available as a mobile application for Android, iPhone, Blackberry, and other smart mobile devices (Cisco, 2012b). Furthermore, Tremblay (2006), describes the following uses for WebEx in e-learning: “focus group energy... permit real-time interaction... and provide a familiar instructional environment that mimic many positive features found in the traditional classroom environment” (para. 3). WebEx can also be used to host large virtual colloquia (Bonjanova & Pang, 2010).

According to Cisco (2012c) there are three pricing tiers for WebEx—a free version which allows only three users and provides basic features and two paid versions, with the most popular version allowing up to twenty-five users and larger storage space for archived recordings for \$49.00 per month. WebEx also offers educational pricing. In addition, most users will need to be provided with, at the least, headsets but preferably web cameras to get the richest experience from the service. This is expected to cost approximately \$10.00 per RVC user, with the total estimate for startup equipment estimated at \$3,500 for 350 users. Each year, additional equipment many need to purchased or replaced, and this is expected to be an ongoing expense. WebEx does not require hosting, and the amount of storage space available for archived recordings is dependent on the pricing tier. The project team recommends downloading recordings and archiving them on a campus server, which will require some storage needs. WebEx will also require both initial and ongoing support and training for optimal use.

Tool for content development

The RVC project team recommends Wikispaces (Wikispaces, 2012) to use for course content development. Wikispaces allows for various levels of privacy configurations which can be varied by page and person. The “private setting” requires everyone to login to gain access, which ensures compliance with FERPA and HIPPA. The system can also be set up so that everyone with a common e-mail address (such as a school email address) will automatically be given access upon request. Wikispaces is intuitive, simple to learn, and provides thorough help

resources, as well as an excellent customer service response team. Their customer support includes direct contact with customer service through telephone and e-mail, as well as many training webinars, wikis, videos, and PDFs. Wikispaces is also compatible with mobile devices, such as Android, iPod Touch, iPad, and iPhone.

Pricing for the Private Label Plan is \$4,000 per year for 350 users. This includes an unlimited number of wikis for up to 350 users—including all students and organizers currently using the system. Students and parents can easily make their own wikis at no extra cost, and teachers can have more than one wiki. The Private Label Plan includes features such as central administration, access to information about how and when teachers and students use their wikis, integration into Moodle or other similar software, and uniform templates for wiki sites. In order to adequately secure the content site and to develop a robust platform that supports a wide variety of activity, the RVC project team recommends the Private Label Plan.

Tool for multimedia add-on to course content

The RVC project team recommends Camtasia Studio (TechSmith, 2012) for use as an add-on to supplement course content. Camtasia software is available as a download to local computers, but users can share their productions on the Internet. Camtasia allows users to create and edit full-length videos through screen capturing. Camtasia files are downloaded and stored on the user's computer. The Camtasia/Snagit Bundle allows users to create videos less than 5 minutes in length. Users can publish Camtasia presentations using Google Video, Yahoo Video, or YouTube and then embed them into RVC's content platform.

The main benefit of Camtasia Studio is its functionality. Users can capture PowerPoint slides, demonstrations, videos, music, photos, and webpages and save them as .avi files. They can create interactive videos with features such as clickable links, searching, and a table of contents. They can easily share files on almost any device. The drawback is that most teachers would need training, and then they may or may not use the product—opting instead to use already created videos or simpler software. TechSmith hosts and manages Camtasia publications and frequently rolls out expensive upgrades. However, users can purchase a maintenance agreement with one full year of upgrades and priority technical support for 25% of the price. Camtasia is offered at a 40% discount for educators and an additional volume discount is available if ordering more than five licenses. Camtasia offers the Studio/Snagit Bundle for \$199.00 per computer. Camtasia is fairly straightforward, but the RVC project team recommends dedicated training for faculty and staff. In addition to the training provided by RVC for implementation, the DE Specialists are required to provide refresher training as needed.

Environment for assessment and individual feedback

The RVC project team recommends EasyTestMaker, Surveymonkey, and Rubistar for assessment and feedback. Each tool is web-based and does not require special software. EasyTestMaker (2012) provides a free version that allows users to create unlimited tests, but the online versions require an upgrade. Therefore, the cost per instructor for one year is \$39.95. Since each account allows the instructor to create unlimited tests and the tests can be organized by folder, each instructor only needs one account. Tests can be published online and secured with an access code. Since EasyTestMaker is a web-based tool, the RVC project team recommends that users maintain a copy of the tests on RVC's network. EasyTestMaker hosts and manages test creation and delivery, so there are no additional costs to RVC. However, the RVC should require instructors to backup (export) their tests to RVC storage so that RVC administrators can access the tests, create a test library, and for investigative purposes. Nominal storage costs and space may be expected in backing up these assessments.

Surveymonkey (2012) is a web-based tool that allows instructors to gather feedback from parents and students. The tool is intuitive and easy to follow. The basic plan is free and is limited to ten questions and 100 responses. However, users can create, manage, and analyze an unlimited number of surveys. Instructors create surveys and can either email the link or post the link in the classroom. RVC and the school districts can also use Surveymonkey to gather feedback from instructors and parents. Surveymonkey hosts and maintains the surveys, but data can be downloaded for reporting under the paid plans. However, users can view results at any time. For security purposes, the RVC project team recommends that the surveys are delivered through a secured connection. The RVC project team recommends the basic plan for implementation.

Rubistar (2012) provides a step-by-step method for creating rubrics. The host maintains a comprehensive database of rubrics for public access. Also, users can register for a free account to create their own rubrics using custom questions or questions stored in Rubistar's database. Rubistar organizes and catalogs questions by topic making it very simple for instructors to search and create rubrics. Moreover, instructors can enter class results and Rubistar calculates percentages. Under the basic plan, instructors should print the rubric for permanent storage. Numerical results should be manually input into RVC's secured storage server. Paper documents can be delivered and stored at the students' home institution. The RVC project team recommends the basic plan.

Table 1

Summary of Recommended Technology Suite for the Regional Virtual School

| Technology | Category | Pros | Cons | Hosting | Annual Cost | Training |
|-------------------------------------|--------------------------|---|---|--|---|---|
| Free Forums | Asynchronous environment | Reliability, scalability, and versatility | Free version includes advertisements; program can be complex. | Free Forums (No RVC hosting required.) | Free or other tiers including \$84 annually (\$7/mo for 50K views) per account; price increases depending on number of views. | Minimal to moderate. Project team will provide initial training and follow-up will be provided by DE Specialists |
| Email | Asynchronous environment | N/A | N/A | RVC Districts | None. (The RVC will use the districts' existing email client.) | Minimal |
| Cisco WebEx | Synchronous Environment | Reliability, versatility, and proven effectiveness for collaboration in online distance learning. | Pricing | WebEx (No RVC hosting required.) | \$600 per account + approx \$3500 total for start up equipment for 350 users | Minimal to moderate. Project team will provide initial training and follow-up will be provided by DE Specialists |
| Wikispaces | Content Manager | Reliability, high quality customer service, and easily integrated. | Pricing | Wikispaces (No RVC hosting required.) | \$4000 for 350 users; price increases depending on number of users. | Minimal. Project team will provide. |
| Camtasia Studio with Snag it Bundle | Media Add-on | Flexibility, functionality, and can be integrated with other tools. | Training investment | No RVC hosting required. Files can be uploaded to Wikispaces | \$199/license | Moderate to in-depth. Project team will provide initial training and follow-up will be provided by DE Specialists |
| EasyTestMaker | Assessment | Secured and broad range of available formats. | N/A | EasyTestMaker (No RVC hosting required.) | \$39.95/instructor | Minimal. Project team will provide. |
| SurveyMonkey | Assessment | Easy to create a variety of surveys. | Not secured and only ten (10) questions provided in free version. | SurveyMonkey (No RVC hosting required.) | Free for up to ten (10) questions per survey | Minimal. Project team will provide. |
| Rubistar | Assessment | Step-by-step instructions and database of sample rubrics. | Not integrated. Users must manually transfer results to LMS. | Rubistar (No RVC hosting required.) | Free | Minimal to moderate. Project team will provide initial training and follow-up will be provided by DE Specialists |

Section III: Planning for Presentation

This section describes how the RVC project team plans to present the Technology Suite to stakeholders including distribution of work, and the next steps needed to complete the RVC Technology Suite project. The distribution of project tasks remains the same as submitted in the Project Proposal:

- Jacklyn Thompson – Developer, asynchronous and asynchronous environments
- Kelly Carter – Developer, content development and multimedia add-ons

- Cindy Lyons – Developer, assessment tools and project report manager

The project team plans to develop a wiki to host the Technology Suite tools. In addition, the team will provide training tutorials, FAQs, and recordings to demonstrate each selected tool. The following table lists remaining tasks and due dates. Each team member is responsible for her assigned technology.

| Task | Due Date |
|---|-------------------|
| Select and design Wiki | November 4, 2012 |
| Compose script for demonstration | November 4, 2012 |
| Add Technology Suite Content | November 6, 2012 |
| Record and upload tutorials and demos to Wiki | November 7, 2012 |
| Test technologies and Practice demonstration | November 10, 2012 |
| Proofread and review Wiki | November 10, 2012 |
| Present RVC to stakeholders | November 11, 2012 |

After the project team presents the learning environment to the stakeholders, and upon their approval, the project team will proceed to setup training dates for all administrators, instructors, and invitees. The project team expects the RVC to go live for the 2013-2014 academic year, beginning in August 2013. Beginning January 2, 2013 the project team will recruit DE Specialists and work with the DE Specialists to hire instructors, gather student information, and build the curriculum. The project team will continue to work with the specialists to ensure the system is adequate and ready for implementation. In addition, the project team will work with the school districts to communicate information to parents, students, and teachers. Finally, project team, DE Specialists, and school districts will work together to ensure that RVC students receive adequate support and are included in school activities as appropriate. This includes access to the library and other resources; communication with counseling staff using RVC technology, and notification of school activities such as PTA meetings, sports events, ceremonies, and other such events.

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Appendix
Proposal for RVC Project

**K-12 Regional Virtual Campus
Proposal**

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K-12 Regional Virtual Campus

Mission Statement

The Mission of the K-12 Regional Virtual Campus is to provide learning opportunities for students who are unable to attend a physical classroom due to geographic distance, limited mobility, or other restrictions. We believe in “no boundaries,” and that all children should have access to education to empower them to achieve their dreams. It is our goal that no child shall be deprived the benefits of education and that no child shall be denied access due to race, sex, religion, nationality, or sexual orientation. Using technology, the K-12 Regional Virtual Campus provides various opportunities for student support and interaction and works in conjunction with area school districts to provide students and families with face-to-face support. The K-12 fully-accredited curriculum is designed to provide students with the best solution for success.

Introduction

The K-12 Regional Virtual Campus (RVC) is a collaboration among area school systems and the K-12 Regional Virtual Campus (RVC). Primary and secondary schools serving Districts 1, 2, and 3 are partners in this initiative to provide distance learning targeted to remote students, although available to all district students. The estimated target is approximately 100 total students, with equal dispersion among the grade levels. Key stakeholders include: students, faculty, administrative staff, parents, public and private investors, technologists and other IT staff, including trainers and technical support. The RVC provides the technology for interaction and support, delivering course content, and assessing instructor and student success. The district school systems provide the administrative functions, such as enrolling the students, counseling, permanent record storage, and other operations. In addition, at least one full-time Distance Education (DE) Specialist with the necessary credentials and experience to work as a liaison between the RVC and Districts will be employed by each district. This person may coordinate face-to-face meetings with students for advising, counseling, or other functions as needed. In addition, the DE Specialist provides expertise and guidance to the RVC to ensure that the RVC is adhering to appropriate federal and state educational and literacy guidelines in conjunction with the District school system. RVC graduates will be recognized as if they graduated from their respective school systems. Diplomas will record the name of their area school and be awarded at the same time and with the same designations as awarded to students attending District schools.

Requirements

The RVC is required to provide the necessary technology and other materials needed to deliver online courses. According to Greenhow, Robelia, and Hughes (2009) K-12 learners use Web 2.0 technologies to explore and share information. Young learners enjoy sharing videos, audio files, and information about themselves. Moreover, K-12 educators using Web 2.0 allow learners to explore, create, and share learning experiences in a dynamic environment that

capitalizes on the technological skills of young learners (Greenhow, et al., 2009). Therefore, RVC requires a platform that allows for student-student interaction, teacher-student interaction, and student-content interaction. In order to meet these requirements, RVC will provide the following tools:

- Environment for asynchronous interaction
- Environment for synchronous interaction
- Tool for content development
- Tool for multimedia add-on to course content
- Environment for assessment and individual feedback

Environment for asynchronous interaction

The RVC will recommend a platform to provide faculty, students, parents and administration and other users the ability to communicate at different times. Components of the platform may include email, conferencing, file sharing, or other such tools. Users may make use of existing email accounts or the RVC email client to be hosted by the Districts. ProBoards Forum (ProBoards, Inc., 2012) is currently being evaluated for conferencing and file sharing. Little to no training is expected for the email client. Minimal training may be needed for the ProBoards Forum, and basic user-orientations and technical support should be provided by the Districts.

Environment for synchronous interaction

The RVC will recommend a platform to provide faculty, students, and administration the ability to communicate at the same time. Components of the platform may include instant messaging, teleconferencing, audio and video discussions, or other such tools. Cisco WebEx (Cisco, 2012) and Skype (2012) are currently being evaluated as an environment for synchronous interaction. A moderate amount of training may be needed for users to effectively use this tool, and orientation and technical support should be provided by the Districts.

Tool for content development

The RVC will recommend a technology to deliver, organize, and manage course content that is compatible with the Districts' curricula and meets the accreditation standards set forth by the regional accrediting agency. Wikispaces (2012) is currently being evaluated to house the main course content. Wikispaces (2012) meets the following criteria: reliability, ease of use, hosted by a third party, minimal training needed for course designers, ability to incorporate audio/visual components, and a visually pleasing, intuitive interface. Also, Wikispaces (2012) is designed to be used by K-12 schools and offers group accounts with up to 100 wikis for \$1,000 a year.

Tool for multimedia add-on to course content

The RVC will recommend the necessary multimedia add-ons to course content to facilitate learning using a variety of tools. Any additional tools needed to access and operate the technology developed in this project will be provided by the RVC, either directly, or through a third-party arrangement. MIT's K-12 (MIT.edu, n.d.) videos are being evaluated as a multimedia add-on to course content. At this time, it is expected that little to no training will be needed for students, faculty, or other RVC users to employ this tool.

Environment for assessment and individual feedback

The RVC will recommend a platform that will provide the faculty and administration at appropriate agencies the ability to effectively assess RVC's performance and the performance of its faculty. In addition, the RVC will provide a secure and confidential method for students to communicate to faculty and administration. RVC is considering EasyTestMaker (2012), SurveyMonkey (2012), Rubistar (4Teachers.org, 2012), and Halogen (Halogen Software, Inc., 2012) as possible solutions for assessment. RVC will present the assessment tools in a training session to online instructors and provide online tutorials for using assessment tools. RVC will transfer student records to the District schools for official grading and permanent storage.

RVC Development Staff and Designation of Responsibilities

The RVC development staff and responsibilities are as follows:

Jacklyn Thompson – Developer, Asynchronous and Synchronous environments

Kelly Carter – Developer, Content development and multimedia add-ons

Cindy Lyons – Developer, Assessment tools and project report manager

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